

Amendment to the Claims

1. (Currently amended) An electric wire comprising two wire elements, each said wire element including:

a conductive portion being made of an electric conductive material;
and

a convexo-concave surface being formed on the conductive portion to provide a predetermined amount of concave portions having a predetermined section with a predetermined depth extending in a direction of thickness of the conductive portion, on the surface of the conductive portion, along lengthwise of the conductive portion, so as to increase skin effect in a high frequency electric current,

wherein the two wire elements are combined integrally to engage the convexo-concave surfaces of said two wire elements mutually,

wherein the cross section of the conductive portion is formed into any shape selected from a group consisting of square, rectangular, trapezoid and any other polygon.

2. (Previously presented) The electric wire according to claim 1, wherein the conductive portion is made of any one of a metal selected from a group consisting of copper, aluminum, iron and an alloy of them, plastic with dispersed electric conductive particles selected from a group consisting of metal fiber and carbon black, electric conductive plastic, electric conductive polymeric organic substance, and non-metallic electric conductors.

3. (Cancelled)

4. (Currently amended) ~~The electric wire according to claim 1, wherein~~
An electric wire comprising two wire elements, each said wire element including:

a conductive portion being made of an electric conductive material;
and

a convexo-concave surface being formed on the conductive portion to
provide a predetermined amount of concave portions having a predetermined section
with a predetermined depth extending in a direction of thickness of the conductive
portion, on the surface of the conductive portion, along lengthwise of the conductive
portion, so as to increase skin effect in a high frequency electric current,

wherein the two wire elements are combined integrally to engage the
convexo-concave surfaces of said two wire elements mutually,

wherein the conductive portion is made of any one of a metal selected
from a group consisting of copper, aluminum, iron and an alloy of them, plastic with
dispersed electric conductive particles selected from a group consisting of metal fiber
and carbon black, electric conductive plastic, electric conductive polymeric organic
substance, and non-metallic electric conductors,

wherein the cross section of the conductive portion is formed into any
shape selected from a group consisting of square, rectangular, trapezoid and any other
polygon.

5. (Previously presented) The electric wire according to claim 1,
wherein the cross section of the concave portion is formed into any one of rectangular
having an elongated vertical side, V-shape, U-shape and trapezoid.

6. (Previously presented) The electric wire according to claim 1,
wherein the conductive portion is made of any one of a metal selected from a group

consisting of copper, aluminum, iron and an alloy of them, plastic with dispersed electric conductive particles selected from a group consisting of metal fiber and carbon black, electric conductive plastic, electric conductive polymeric organic substance, and non-metallic electric conductors, wherein the cross section of the concave portion is formed into any one of rectangular having an elongated vertical side, V-shape U-shape and trapezoid.

7. (Currently amended) ~~The electric wire according to claim 1, wherein~~
An electric wire comprising two wire elements, each said wire element including:

a conductive portion being made of an electric conductive material;
and

a convexo-concave surface being formed on the conductive portion to
provide a predetermined amount of concave portions having a predetermined section
with a predetermined depth extending in a direction of thickness of the conductive
portion, on the surface of the conductive portion, along lengthwise of the conductive
portion, so as to increase skin effect in a high frequency electric current,

wherein the two wire elements are combined integrally to engage the
convexo-concave surfaces of said two wire elements mutually,

wherein the conductive portion is made of any one of a metal selected from a group consisting of copper, aluminum, iron and an alloy of them, plastic with dispersed electric conductive particles selected from a group consisting of metal fiber and carbon black, electric conductive plastic, electric conductive polymeric organic substance, and non-metallic electric conductors,

wherein the cross section of the conductive portion is formed into any shape selected from a group consisting of square, rectangular, trapezoid and any other polygon,

wherein the cross section of the concave portion is formed into any one of rectangular having an elongated vertical side, V-shape, U-shape and trapezoid.

8 – 10 (Cancelled)

11. (Previously presented) The electric wire according to claim 1, wherein one said wire element has concave or convex portions of an amount of N and convex or concave portions of an amount of $N+1$ on at least one of the surfaces of one conductive portion, and the other said wire element, which engages with the one wire element, has convex or concave portions of an amount of $N+1$ engaging with the concave or convex portions of the one conductive portion and concave or convex portions of an amount of N engaging with the convex or concave portions of the one conductive portion on the surface of the other wire element which corresponds to the surface of the one wire element.

12. (Currently amended) The electric wire according to claim 1, 4 or 7, wherein one said wire element has concave portions of an amount of N on at least one of the surfaces of one conductive portion, and the other said wire element, which engages with the one wire element, has convex portions of an amount of N engaging with the concave portions of the one conductive portion on the surface of the other wire element which corresponds to the surface of the one wire element.